

Department of Executive Services
Finance and Business Operations Division
Procurement and Payables Section
Strategic Partnerships and Analytics
Environmental Purchasing Program
www.kingcounty.gov/procurement/green
206-263-9294 TTY Relay: 711

Environmentally Preferable Carpet

- INTRODUCTION
- STANDARDS AND GUIDELINES

Carpet Choice and Maintenance Guidelines Standards and Certifications

USAGE HISTORY AND EXPERIENCE
 Carpet Recycling

- BID AND CONTRACT LANGUAGE
- **FOR MORE INFORMATION**
- VENDOR INFORMATION



INTRODUCTION

Few building products are as ubiquitous as carpets and rugs, which cover 70% of U.S. floors, according to the Carpet and Rug Institute, the industry's trade association. A carpet's lifecycle impacts include chemical emissions from manufacturing, depletion of petroleum and other natural resources, transportation, indoor air quality concerns, and disposal costs at landfills and recycling operations. Choosing carpet that minimizes these impacts is especially important given the huge amount of carpeting used in the United States and its relatively short expected useful lifetime. Most carpet manufactured and installed in the U.S. is made of synthetic materials, especially nylon, polyester, and polypropylene face fibers, and most backings are made as a sandwich of polypropylene fabric and latex or PVC. Most commercial carpets are made by bonding a face fiber to a backing fiber, using one of a variety of strong bonding agents. Nylon 6 and nylon 6.6 account for nearly two-thirds of the face fiber market, with polyester as the next most commonly used fiber.

There are many ways that carpet can be made more sustainable. Many companies offer recycled content backing, modular tiles that extend carpet life, recycled content cushion, low or no-VOC adhesives, refurbishing programs that extend carpet life, and recovery programs that keep carpets out of the landfill. Several manufacturers have even committed to reduce the life-cycle impacts of carpet by reducing emissions during manufacture, using solar or other renewable energy to power their plants, and making a commitment to reducing waste, toxics, and non-renewable resource depletion.

STANDARDS AND GUIDELINES

Carpet Choice and Maintenance Guidelines

Several environmentally responsible carpet options are available, each with their own merits and considerations, and what you choose will depend on your specific application. Consider the following when choosing a new carpet:

- The type of fiber (i.e., nylon– nylon 6 or nylon 6.6, polyester, P.E.T., wool), the recycled content, durability, and the recyclability of the face fiber, backing, and cushion
- Carpet fiber construction and pile type, which determine appearance and performance
- Using carpet tiles rather than rolls to facilitate repair and extend the useful life of the carpet
- · Colors and patterns that hide wear

- Carpet fiber construction (manufactured by tufting, weaving, and fusion bonding, of which tufting is the most common) and pile type (loop, cut, or combination), which determine appearance and performance. Lower pile height and higher pile yarn density is better for high traffic areas and gives the best performance.
- Backing or carpet cushion with high recycled content and/or minimal resource use
- Environmentally preferable adhesives, and pre-applied adhesives for less waste
 - Some carpet tiles come with pre-applied adhesives for ease of installation. This type of tile tends to emit less VOCs because it does not require a separate adhesive application during installation.
- Use carpet only where necessary, and maintain and clean it properly to maximize its life.
- Proper installation
- Proper maintenance Carpet and Rug Institute Carpet Maintenance Guidelines
- Recycling your old carpet to keep it out of the landfill

Standards and Certifications

Sustainable Carpet Assessment Standard NSF/ANSI Standard 140-2007e

The standard ranks products as bronze, silver, gold, or platinum, evaluating them in terms of sustainability in the areas of

- Public Health and Environmental
- Energy and Energy Efficiency
- Bio-based and Recycled Content
- Manufacturing
- Reclamation and End-of-Life management
- SCS Certified

Sustainable Carpet

SCS made that standard equivalent to the higher two levels of NSF 140 and certifies products to the standard through its Sustainable Choice program.

FloorScore - indoor air quality for:

- Rubber Flooring
- Cork Flooring
- ·Hardwood, Engineered and Bamboo Flooring
- Laminate Flooring
- Polymeric Flooring
- •Wall base and related products
- Flooring Adhesives
- Carpet and Rug Institute (CRI) Green Label Plus certification for Indoor Air Quality (IAQ)

Certifies carpet, cushions, and adhesives

Carpet America Recovery Effort

Carpet America Recovery Effort (CARE) is a joint industry-government effort to increase the amount of recycling and reuse of post-consumer carpet

GreenGuard Certification (UL Environment)

Indoor Air Quality (IAQ) for resilient flooring and adhesives

USAGE HISTORY AND EXPERIENCE

King County agencies buy carpet, cushions, adhesives and installation services for small remodels and renovation work through the State of Washington flooring contract. Many of the products available have various certifications for recycled content and other elements of environmental preferability, including low emissions of volatile organic chlorides (VOCs).

In the past year, King County purchased 6,511 square yards of recycled content carpet with low VOC's. The carpets contained 10 to 57 percent recycled content and are certified to NSF/ANSI-140 Sustainable Carpet Assessment Standard. These carpets and adhesives also met the Carpet and Rug Institute Green Label Plus certification for Indoor Air Quality (IAQ).

In December 2011, a new flooring contract was awarded by US Communities that the County uses in addition to the state contract. This contract offers many sustainable choices and certified products, including a carpet tile product that uses minimal adhesives that contain virtually no-VOCs. This project was led by City of Seattle to encourage the most environmentally preferable products and makes them available nationwide through this contract.

Carpet Recycling

King County agencies recycle used carpet through the State of Washington flooring contract. Agencies use this service when they are replacing existing carpet with new flooring materials. The reclaimed carpet is collected at a local warehouse and then shipped to a carpet manufacturer to be turned into carpet pad, car parts and other products.

Local Recyclers:

Washington State Floor Covering Association WSFCA Members Offering Recycling Services Recovery 1 / Tacoma, WA 253-627-1180 www.recovery1.com

Recycling: Carpet, Pad & Building Materials

AGAIN / Kent, WA 253-981-6675 www.againco.com

Recycling: Carpet & Pad

BID AND CONTRACT LANGUAGE

King County currently uses the following flooring contracts:

State of Washington contract #00710

5.1 RECOVERED AND RECYCLED CONTENT

All materials shall meet the EPA Comprehensive Procurement Guidelines for Recovered and Recycle content.

A. ENVIRONMENTALLY PREFERABLE CARPET

- 1) The intent of this category is to provide users with environmentally preferable carpet options. Includes Broadloom and Carpet Tile.
- 2) Bidder shall indicate the <u>category</u> for which each EPP submittal is intended on the <u>Price Worksheet</u>. Must meet minimum requirements as set forth <u>herein</u> and must meet the following requirements:
- Minimum NSF/ANSI 140-2007e Platinum
- Non-PVC Backing
- · Face fiber must be recyclable back into carpet face fiber

ADDITIONAL CARPET BACKING OPTIONS

The state recognizes the availability of additional carpet backing options. Finished product must meet minimum requirements as set forth - Minimum requirements

	Category A	Category B	Category C
A. Broadloom	Moisture Barrier Broadloom	Performance Broadloom	Latex Broadloom
B. Modular Tile	High Performance Modular Tile	Standard Performance Modular Tile	Light Duty Modular Tile
Warranty Minimums	 25 years against: Wear Static Charge Dimensional Stability Edge Ravel Delamination Tuft Bind Adhesion to Subfloor Stain Resistance Colorfastness 	 15 years against: Wear Static Charge Dimensional Stability Edge Ravel Delamination Tuft Bind Adhesion to Subfloor Stain Resistance Colorfastness 	 10 years against: Wear Static Charge Dimensional Stability Edge Ravel Delamination Tuft Bind
Sustainability	NSF 140-2007 Gold	NSF 140-2007 Gold	NSF 140-2007 Gold
Indoor Air Quality (Includes Adhesives)	CRI Green Label Plus	CRI Green Label Plus	CRI Green Label Plus

- Indoor Air Quality: Must meet the Green Label Plus (GLP) requirements of the Carpet and Rug Institute (CRI). GLP number must be provided upon request.
- Sustainability: Must have third party certification in accordance with NSF 140-2007e Sustainability Carpet Assessment Standard at a "Gold" level minimum. Certificate number must be provided upon request.

Adhesives and Sealants:

- Must meet the Green Label Plus (GLP) requirements of the Carpet and Rug Institute (CRI).
 GLP number must be provided upon request.
- Must meet VOC content standards per South Coast Air Quality Management District (SCAQMD) Rule #1168.
- All aerosol adhesives must meet the Green Seal Standard GS-36 requirements in effect on October 19, 2000.

7. REMOVAL, RECYCLING AND DISPOSAL SERVICES

Contractor shall provide services to remove existing flooring and related materials.

Contractor shall provide for dust control and property protection during the removal process. Purchaser shall pre-approve Contractor's dust control and property protection plans. Contaminants from removal activities may be contained by sealing doors and other openings with tape at head, jamb, and sill. Window exhaust systems to establish negative pressure in contaminant-producing work area, ensuring continuous flow of air into work area may be used. Seal exhaust system ductwork that might leak into building or mechanical systems.

Room surfaces (walls, ceilings and floors) shall be left free from dust, dirt and old adhesives, and be left in a condition appropriate to accept new materials.

Subfloors (Wood or Concrete) shall be free from dust, dirt and old adhesives in a condition appropriate to accept new flooring (in accordance with the floor preparation requirements described herein). Walls shall be left free from dust, dirt and old adhesives and be left in a condition appropriate to accept new wall base (if applicable). Touch up painting shall be the responsibility of the Customer.

Contractor shall dispose of all waste in accordance with federal, state and local laws, permits and regulations. All removed materials shall be removed from the site by the Contractor and disposed of properly. Contractor shall employ best efforts to recycle all materials and to minimize landfills and/ or incineration disposal of materials.

Contractor agrees to keep written records of its material management at its corporate headquarters so that Purchasers may audit those records upon request, to ensure proper handling and disposition.

To the extent allowable by rules and laws, Contractor shall take responsibility and title to all waste materials when the material is in the sole possession of the Contractor.

Note on Asbestos: Purchaser shall provide testing for asbestos-containing materials if necessary. Any asbestos abatement will be the responsibility of the Purchaser. All carpet removed within the scope of this contract should not contain asbestos.

A. Carpet

Contractor shall provide a recycling program for worn/used carpet and installation scraps. All waste carpet material generated within the scope of this Contract regardless of manufacturer, fiber type or construction must be shipped to a material recovery facility for recycling with exceptions for biocontamination or hazardous waste which requires proper disposal in accordance with EPA guidelines on hazardous waste disposal.

For each order in which carpet is removed, the Contractor shall:

- Remove used carpet and installation scraps and deposit into a container supplied by a licensed transporter of recyclable materials in accordance with the material recovery facility's requirements to assure that all materials will be recovered. (Adhesives shall be removed in accordance with the recommendations of the Carpet and Rug Institute (CRI). Adhesive removal solvents shall comply with Carpet and Rug Institute <u>CRI Carpet Installation Standard 2009</u>).
- Provide the Customer with a certification of product recycling identifying the materials removed, quantities (estimated weight) and disposition of recovered materials (recycled, energy recovery, landfill), and may include identifying specific product components such as fiber type and backing materials. The certificate shall be sent to the Purchaser within sixty (60) days from the date of recycling/disposal, but in no case shall this exceed 365 days from the date of removal.

Bid Submittal: Bidder shall submit a detailed account of its recycling program and a signed, notarized acknowledgement from the Material Recovery Facility that the Bidder will utilize.

B. Resilient Flooring and Other Materials

Contractor shall remove and legally dispose of existing resilient flooring and other materials (wall base). When feasible, Contractor shall provide recycling of these materials to the greatest extent possible.

C. Reporting Requirements

The Contractor shall coordinate with OSP to formulate a mutually-acceptable reporting format for the purpose of monitoring Contractor's waste management program and tracking material status and disposition within 90 days of award.

FOR MORE INFORMATION

- Product Stewardship Institute Carpet
- Advancing Carpet Stewardship: A How-To Guide (2015)

VENDOR INFORMATION

King County's current vendors:

Great Floors – King County CPA #493237 (Based on State of Washington contract #00710)